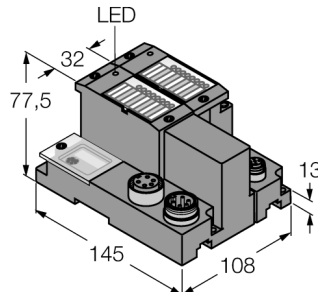


# Set for Simple I/O Communication via DeviceNet™ in IP67

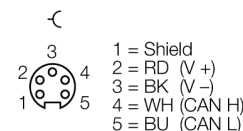
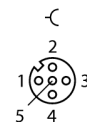
## TI-BL67-DN-S-2



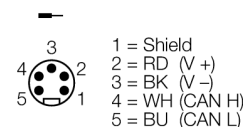
|                                          |                                                                                                                  |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Type designation</b>                  | TI-BL67-DN-S-2                                                                                                   |
| Ident no.                                | 1545114                                                                                                          |
| Number of channels                       | 2                                                                                                                |
| Dimensions (W x L x H)                   | 108 x 145 x 77.5 mm                                                                                              |
| <b>Supply voltage</b>                    | 24 VDC                                                                                                           |
| max. system supply current $I_{mb}$ (5V) | 1.5, A                                                                                                           |
| Max. sensor supply $I_{sens}$            | 4 A electronically limited current supply<br>electronically limited current supply                               |
| max. load current $I_o$                  | 8 A                                                                                                              |
| Admissible range                         | 11...26 VDC                                                                                                      |
| <b>Fieldbus transmission rate</b>        | 125/250/500 kbps                                                                                                 |
| Fieldbus address range                   | 0...63                                                                                                           |
| Fieldbus addressing                      | 2 decimally coded rotary switches                                                                                |
| Service interface                        | RS232 interface (PS/2 socket)                                                                                    |
| Fieldbus connection technology           | 2 x 7/8", 5-pin                                                                                                  |
| Voltage supply connection                | From DeviceNet cable                                                                                             |
| Fieldbus termination                     | external                                                                                                         |
| <b>Transmission rate</b>                 | 115.2 kbps                                                                                                       |
| Electrical isolation                     | isolation of electronics and field level via opto-couplers                                                       |
| <b>Output connectivity</b>               | M12                                                                                                              |
| <b>Sensor supply</b>                     | 0.5 A per channel, short-circuit proof                                                                           |
| <b>Relative humidity</b>                 | 5...95 % (internal), level RH-2, no condensation (when stored at 45 °C)                                          |
| Vibration test                           | Acc. to EN 61131                                                                                                 |
| Extended vibration resistance            | VN 02-00 and higher                                                                                              |
| - up to 5 g (at 10 to 150 Hz)            | for mounting on DIN rail no drilling according to EN 60715, with end bracket                                     |
| - up to 20 g (at 10 up to 150 Hz)        | for mounting on base plate or machinery<br>Therefore every second module has to be mounted with two screws each. |
| Shock test                               | Acc. to IEC 60068-2-27                                                                                           |
| Drop and topple                          | acc. to IEC 68-2-31 and free fall to IEC 68-2-32                                                                 |
| Electromagnetic compatibility            | Acc. to EN 61131-2                                                                                               |
| Protection class                         | IP67                                                                                                             |
| <b>Included in delivery</b>              | 1 x end plate BL67                                                                                               |

- A special software (function module) for integration in PLC systems is not required.
- Cable max. 50 m between interface and read/write head
- 3 decimal rotary coding switches to adjust the bus address
- Maximum transmission rate to the fieldbus 120/250/500 kbps
- Two males 7/8", 5-pin, for fieldbus connection
- LEDs for display of supply voltage, group and bus errors as well as status and diagnostics
- Connection of up to 2 read/write heads via BL ident M12 extension cables
- Mixed operation of HF and UHF read/write heads

### Wiring Diagram



### DeviceNet™ IN

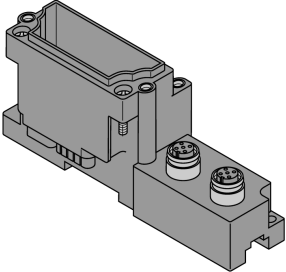
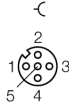
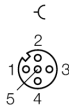
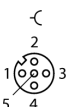


### Functional principle

BL ident can be integrated into your plant structure in many different ways. Various fieldbus standards, such as PROFIBUS-DP, EtherNet/IP, Ethernet Modbus TCP, EtherCAT, DeviceNet, CANopen and PROFINET IO allow flexible integration. BL ident simple electronic modules (BL20-2RFID-S, BL67-2RFID-S) can be integrated into existing control or host systems without function block, since standard input/output process data is used for communication. Programmable gateways with peripheral pre-processing function relieve the control system and fieldbus level. Preassembled sets (2, 4, 6 or 8-port), easily mounted, available for all fieldbus networks.

**Set for Simple I/O Communication via DeviceNet™ in IP67**  
**TI-BL67-DN-S-2**

**Compatible base modules**

|                                                                                                                   |                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Dimension drawing</b></p>  | <p><b>Type</b></p> <p>BL67-B-2M12<br/>6827186<br/>2 x M12, 5-pole, female, a-coded</p> | <p><b>Pin configuration</b></p> <p>.../S2500 Connectors</p>  <p>1 = BN (+)<br/>2 = BK (Data)<br/>3 = BU (GND)<br/>4 = WH (Data)<br/>5 = shield</p> <p>.../S2501 Connectors</p>  <p>1 = BN (+)<br/>2 = WH (Data)<br/>3 = BU (GND)<br/>4 = BK (Data)<br/>5 = shield</p> <p>Connectors .../S2503</p>  <p>1 = RD (+)<br/>2 = BU (Data)<br/>3 = BK (GND)<br/>4 = WH (Data)<br/>5 = shield</p> |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Set for Simple I/O Communication via DeviceNet™ in IP67

### TI-BL67-DN-S-2

#### LED display

| LED       | Color | Status            | Meaning                                                                                                                                                         |
|-----------|-------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D         |       | OFF               | No error message or diagnostics active.                                                                                                                         |
|           | RED   | ON                | Failure of module bus communication. Check if more than 2 adjacent electronic modules are pulled. Relevant modules are located between gateway and this module. |
|           | RED   | FLASHING (0.5 Hz) | Upcoming module diagnostics                                                                                                                                     |
| RW0 / RW1 |       | OFF               | No tag, no active diagnostics                                                                                                                                   |
|           | GREEN | ON                | Tag available                                                                                                                                                   |
|           | GREEN | FLASHING (2 Hz)   | Data exchange with tag enabled                                                                                                                                  |
|           | RED   | ON                | Read/write head error                                                                                                                                           |
|           | RED   | FLASHING (2 Hz)   | Short-circuit in the supply line of read/write head                                                                                                             |

# Set for Simple I/O Communication via DeviceNet™ in IP67

## TI-BL67-DN-S-2

### I/O Data Mapping

| INPUT     | BYTE | Bit 7               | Bit 6 | Bit 5  | Bit 4    | Bit 3   | Bit 2        | Bit 1        | Bit 0        |
|-----------|------|---------------------|-------|--------|----------|---------|--------------|--------------|--------------|
| INPUT     | BYTE | Bit 7               | Bit 6 | Bit 5  | Bit 4    | Bit 3   | Bit 2        | Bit 1        | Bit 0        |
| Channel 0 | 0    | DONE                | BUSY  | ERROR  | XCVR CON | XCVR ON | TP           | TFR          | Reserved     |
|           | 1    | Error Code          |       |        |          |         |              |              |              |
|           | 2    | Error Code 1        |       |        |          |         |              |              |              |
|           | 3    | Reserved            |       |        |          |         |              |              |              |
|           | 4    | READ DATA (8 Byte)  |       |        |          |         |              |              |              |
|           | 5    |                     |       |        |          |         |              |              |              |
|           | ...  |                     |       |        |          |         |              |              |              |
|           | 10   |                     |       |        |          |         |              |              |              |
|           | 11   |                     |       |        |          |         |              |              |              |
|           |      |                     |       |        |          |         |              |              |              |
| Channel 1 | 12   | DONE                | BUSY  | ERROR  | XCVR CON | XCVR ON | TP           | TFR          | Reserved     |
|           | 13   | Error Code          |       |        |          |         |              |              |              |
|           | 14   | Error Code 1        |       |        |          |         |              |              |              |
|           | 15   | Reserved            |       |        |          |         |              |              |              |
|           | 16   | READ DATA (8 Byte)  |       |        |          |         |              |              |              |
|           | 17   |                     |       |        |          |         |              |              |              |
|           | ...  |                     |       |        |          |         |              |              |              |
|           | 22   |                     |       |        |          |         |              |              |              |
|           | 23   |                     |       |        |          |         |              |              |              |
|           |      |                     |       |        |          |         |              |              |              |
| OUTPUT    | BYTE | Bit 7               | Bit 6 | Bit 5  | Bit 4    | Bit 3   | Bit 2        | Bit 1        | Bit 0        |
| Channel 0 | 0    | XCVR                | NEXT  | TAG ID | READ     | WRITE   | TAG INFO     | XCVR INFO    | RESET        |
|           | 1    | Reserved            |       |        |          |         | Byte Count 2 | Byte Count 1 | Byte Count 0 |
|           | 2    | Address high byte   |       |        |          |         |              |              |              |
|           | 3    | Address low byte    |       |        |          |         |              |              |              |
|           | 4    | WRITE DATA (8 Byte) |       |        |          |         |              |              |              |
|           | 5    |                     |       |        |          |         |              |              |              |
|           | ...  |                     |       |        |          |         |              |              |              |
|           | 10   |                     |       |        |          |         |              |              |              |
|           | 11   |                     |       |        |          |         |              |              |              |
|           |      |                     |       |        |          |         |              |              |              |
| Channel 1 | 12   | XCVR                | NEXT  | TAG ID | READ     | WRITE   | TAG INFO     | XCVR INFO    | RESET        |
|           | 13   | Reserved            |       |        |          |         | Byte Count 2 | Byte Count 1 | Byte Count 0 |
|           | 14   | Address high byte   |       |        |          |         |              |              |              |
|           | 15   | Address low byte    |       |        |          |         |              |              |              |
|           | 16   | WRITE DATA (8 Byte) |       |        |          |         |              |              |              |
|           | 17   |                     |       |        |          |         |              |              |              |
|           | ...  |                     |       |        |          |         |              |              |              |
|           | 22   |                     |       |        |          |         |              |              |              |
|           | 23   |                     |       |        |          |         |              |              |              |
|           |      |                     |       |        |          |         |              |              |              |